

REGULATION III - CONTROL OF AIR CONTAMINANTS

RULE 356
CONTROL OF EMISSIONS FROM RESTAURANT OPERATIONS

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6/3/99 DRAFT
For Public Workshop on 6/17/99
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MARICOPA COUNTY
AIR POLLUTION CONTROL REGULATIONS

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RULE 356
CONTROL OF EMISSIONS FROM RESTAURANT OPERATIONS

SECTION 100 - GENERAL

- 101 PURPOSE:** To limit the discharge of particulate matter from chain-driven charbroiling operations by establishing emission and control standards.
- 102 APPLICABILITY:** This rule applies to owners and operators of commercial cooking operations, preparing food for human consumption. The rule requirements currently apply to chain-driven charbroilers used to cook meat. All other commercial restaurant cooking equipment including, but not limited to, under-fired charbroilers, may be subject to future rule provisions.

SECTION 200 - DEFINITIONS: For the purposes of this rule, the following definitions shall apply:

- 201 CATALYTIC OXIDIZER** - A control device which burns or oxidizes smoke and gases from the cooking process to carbon dioxide and water using an infrastructure coated with a noble metal alloy.
- 202 CHAIN-DRIVEN CHARBROILER** - A semi-enclosed cooking device with a mechanical chain which automatically moves food through the device and consists of three main components: a grill, a high temperature radiant surface, and a heat source.
- 203 CHARBROILER** - A cooking device composed of the following three major components: a grated grill, a high-temperature radiant surface, and a heat source. The heat source heats the high-temperature radiant surface, which provides the heat to cook the food resting on the grated grill. This includes, but is not limited to, broilers: grill charbroilers, flamebroilers, and direct-fired barbecues.
- 204 EXISTING CHAIN-DRIVEN CHARBROILERS** - Any chain-driven charbroiler operating on or before (date of adoption), 1999.
- 205 MEAT** - For the purposes of this rule, includes beef, lamb, pork, poultry, fish and seafood.
- 206 NEW CHAIN-DRIVEN CHARBROILER** - Any chain-driven charbroiler initially installed and operated after (date of adoption), 1999.

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- 207 PARTICULATE MATTER (PM)** - Any material, except uncombined water, which has a nominal aerodynamic diameter smaller than 100 microns (micrometers) and which exists in a finely divided form as a liquid or solid at actual conditions.
- 208 RESTAURANT** - Any stationary, commercial, cooking establishment which prepares food for human consumption.
- 209 UNDER-FIRED CHARBROILER** - A cooking device which has a grill, a high temperature radiant surface and a heat source which is located below the food.
- 210 VOLATILE ORGANIC COMPOUND (VOC)** - Any organic compound which participates in atmospheric photochemical reactions, except the non-precursor organic compounds.
- 211 WEEKLY** - A consecutive seven day period.

SECTION 300 - STANDARDS

- 301 LIMITATIONS - OPACITY/GENERAL:** No person shall discharge into the ambient air from any restaurant operations any air contaminant, other than uncombined water, in excess of 20 percent opacity.
- 302 CONTROLS REQUIRED:** An owner or operator shall control the following :
- 302.1** Effective (2 years from the date of adoption), each existing chain-driven charbroiler operating on and after (date of adoption) shall be equipped and operated with a catalytic oxidizer control device and the combination charbroiler/catalyst shall be tested in accordance with the test method specified in subsection 503.2 of this rule and certified by the Control Officer.
- 302.2** No owner or operator shall operate a new chain-driven charbroiler after (date of adoption) unless it is equipped and operated with a catalytic oxidizer control device and a combination charbroiler/catalyst, or other control device if found to be at least as effective as a catalytic oxidizer in reducing PM and VOC emissions (83% efficiency), and tested in accordance with the test method specified in subsection 503.2 and certified by the Control Officer.
- 303 REQUIREMENTS FOR AIR POLLUTION CONTROL EQUIPMENT**
- 303.1 Providing and Maintaining Control Devices:** Catalytic oxidizers or other control devices shall be maintained in good working order to minimize visible emissions to the atmosphere, and operated, cleaned and maintained in accordance with the manufacturer's specifications.
- 304 EXEMPTIONS:** The provisions of this rule shall not apply to :

304.1 Restaurants that accept a permit condition that limits the amount of meat cooked to less than 875 lbs. per week of meat; or

304.2 Owners or operators that supply evidence from testing pursuant to subsection 503.2, demonstrating that the emissions from the chain-driven charbroiler are less than one pound per day of any criteria air contaminant, and accepting permit conditions necessary to preclude an exceedance of that level of emissions in subsection 503.2.

SECTION 400 - ADMINISTRATIVE REQUIREMENTS

401 CONTROL EQUIPMENT COMPLIANCE SCHEDULE: Any owner or operator that does not comply with Section 302 and 303 of this rule as of (date of adoption) shall submit to the Control Officer a compliance plan to achieve compliance with this rule no later than (180 days after adoption). The owner or operator shall specify dates for completing increments of progress in the plan. The Control Officer may require the owner or operator of a compliance plan to submit subsequent reports on progress in achieving compliance.

SECTION 500 - MONITORING AND RECORDS

501 RECORDKEEPING AND REPORTING: The owner or operator subject to this rule shall comply with the following requirements. These records shall be kept for a period of five (5) years and shall be made available to the Control officer upon request.

501.1 Process Records: For each day of operation, the owner or operator shall maintain weekly records of the amount of meat cooked and monthly records of the amount of meat purchased.

501.2 Exemption Records: Owners and operators of chain-driven charbroilers operating under an exemption from provisions of this rule pursuant to Section 304 of this rule shall maintain weekly records of the amount of meat cooked and monthly records of the amount of meat purchased.

501.3 Catalyst Records: The owner or operator of a catalytic oxidizer shall keep records consisting of both the date of installation or changing of any catalyst and the date, time and nature of the cleaning and maintenance performed on the catalyst.

502 COMPLIANCE DETERMINATION: The test methods as they exist on (date of adoption), as listed below, are adopted by reference as indicated. This adoption by reference includes no future editions or amendments. Copies of test methods referenced in Section 503 are available at the Maricopa County Environmental Services Department, 1001 North Central Avenue, Phoenix, AZ, 85004-1942.

503 TEST METHODS

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503.1 Opacity Determination: The opacity determinations shall be conducted in accordance with the techniques specified in EPA Reference Method 9, 40 CFR Part 60, Appendix A.

503.2 Determination Of PM And VOC: The determination of concentration of particulate matter (PM) and volatile organic compounds (VOC) shall be determined by the South Coast Air Quality Management District protocol entitled, "Determination of Particulate and Volatile Organic Compound Emissions from Restaurant Operations," November 14, 1997.